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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/851,214	05/08/2001	Guido Voit	48839DIV	4235

26474 7590 12/26/2002

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EXAMINER
SACKEY, EBENEZER O

ART UNIT	PAPER NUMBER
1626	

DATE MAILED: 12/26/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)
09/851,214	VOIT ET AL.
Examiner	**Art Unit**
EBENEZER SACKEY	1626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *Dec 4, 2002* .

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *21-40* is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *21-40* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☒ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. *09/622,773* .
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
4) ☐ Interview Summary (PTO-413) Paper No(s). _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claims 21-40 are pending. Claims 33-40 have been added.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/04/02 has been entered.

Claim Rejections - 35 U.S.C. § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having

ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 21-32 and new claims 33-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dewdney (I) or (II) and Flick et al. for the reasons set forth in paper number 3 and 7 respectively. Applicant's arguments are not deemed persuasive.

Applicant's arguments filed 12/04/02 have been fully considered but they are not persuasive. Applicants argue that Dewdney et al. disclose that the presence of magnetite in an iron catalyst which is used for hydrogenating adiponitrile to hexamethylene diamine increases the

formation of impurities. Additionally, applicants argue that the teaching of Dewdney et al. specifically aims at reducing unwanted by-products in the hydrogenation of adiponitrile to hexamethylene diamine and thus, to the skilled artisan who seeks to reduce the formation of such by-products, Dewdney et al.'s statement that the catalyst is preferably obtained from iron or iron oxide without other additions or promoters is of particular significance. This argument is unpersuasive because the instant claims are directed to hydrogenation catalyst consisting essentially of iron or a compound based on iron or mixtures thereof which reads on the disclosure of Dewdney et al. The stipulated ratios of (b)-(d) are well within the disclosure of Dewdney et al. Applicants perception of the invention is not what is in the claims, especially independent claims 21 and 33. Dewdney et al. disclose the essentials of the claims. In claim 22, magnetite is optional therefore it does not need to be in the claim. Limiting the scope of the claims to what the art does not disclose may obviate this rejection. Applicants next argue that the mere fact that a reference can be modified or that references can be combined does not render the resulting modification

or combination obvious unless the prior art suggest the desirability of the combination. Applicants claims are very generic and therefore read on Dewdney et al. Moreover, no showing of unexpected results or properties has been forthcoming.

Applicants next argue that neither of the Dewdney et al.'s references discloses the use of manganese which is mandatory in the amounts of from 0.001 to 1% by weight based on the iron component of (a). This argument is unpersuasive because Flick et al. disclose the use of manganese in the hydrogenation catalyst which embraces the instant invention. See column 2, lines 13-22. Applicants next argue that the catalyst of Flick et al. relates to hydrogenation of dinitriles to amino nitriles which is partial hydrogenation, whereas applicants invention is directed to complete hydrogenation and thus, the catalyst of Flick et al. is not concerned with a catalyst which is suitable to limit or reduce the formation of unwanted by-products in a complete reduction of adiponitrile to hexamethylene diamine. Again, no showing of unexpected results has been forth coming. Additionally, applicants have not shown that the catalyst of Flick et al. is inoperative in a

complete hydrogenation. There is no evidence that distinguishes the prior art from the instantly claimed subject matter. Accordingly, one of ordinary skill in the art would be motivated to manipulate process parameters of the references such as ratios (as note instant claims 21, 29-30, 33, 38-40) in order to improve yield and/or selectivity as taught. For the reasons of record, claims 21-32 and new claims 33-40 are rejected.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to E. Sackey whose telephone number is (703) 305-6889. The examiner can normally be reached on Monday-Friday from 7:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph K. McKane, can be reached on (703) 308-4537. The fax phone number for this Group is (703) 308-4556.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1235.

EOS

December 24, 2002

Joseph K. McKane

Supervisory Patent Examiner

Art Unit 1626, Group 1600

Technology Center 1

Alan L Rotman

ALAN L. ROTMAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600